# STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



# GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

| The Missouri Depar | rtment of Natural F | Resources hereb | y issues a | permit to: |
|--------------------|---------------------|-----------------|------------|------------|
|--------------------|---------------------|-----------------|------------|------------|

| Construction Permit ID: | MOGC00706 |
|-------------------------|-----------|
|-------------------------|-----------|

Title of Project: MoDOT and Amphitheater

Owner: City of Camdenton Address: 437 W Hwy 54

CAMDENTON, MO 65020

The project will also include general site work appropriate to the scope and purpose of the project and will include all the necessary appurtenances to make a complete and usable collection system. The construction of this project will be in the vicinity of the county below and discharge to Receiving Permit ID below:

County: Camden Receiving Permit ID: MO0106399

for the construction of (described construction project):

MoDOT and Amphitheater-Construction of approximately 5,022 lf of 4-inch PVC SDR-21 and 940 lf of 2-inch PVC SDR-21; 2 duplex lift stations. Amphitheater lift station to serve 500 PE and a design average flow of 50,000 gpd, and MoDOT lift station to serve 14.25 PE and a design average flow of 1,425 gpd.

| LS           | HP  | GPM | TDH |
|--------------|-----|-----|-----|
| Amphitheater | 15  | 125 | 177 |
| MoDOT        | 1/3 | 25  | 21  |

Project is in the vicinity of N Business Rte 5 and Hwy 7 in Camdenton, Camden County and discharges to an existing 8-inch sewer with a 360 gpm capacity to be treated at Camdenton WWTP, MO-0106399. Scott Emmerich, MoDOT General Services Manager, provided a Continuing Authority acceptance letter for MoDOT lift station dated April 2, 2024.

Construction of such proposed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and regulation promulgated thereunder, or this permit may be revoked by the Department of Natural Resources (Department) As the Department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

This permit applies only to the construction of water pollution control components; it does not apply to other environmentally regulated areas.

| April 10, 2024 Issue Date         | John Holee, Director<br>Water Protection Program |
|-----------------------------------|--|
| April 09, 2026<br>Expiration Date |  |

#### **APPLICABILITY**

- 1. This permit authorizes the construction of gravity sewer extensions, force mains, and lift stations. Non-earthen flow equalization storage basins at lift stations and inline storage, which flows back into the lift station or collection system, are also included.
- 2. The Missouri Department of Natural Resources may require a site-specific sewer extension construction permit due to compliance and enforcement actions in accordance with 10 CSR 20-6.010(13)(C).
- 3. This permit does not apply to:
  - A. Earthen storage basins;
  - B. Exempt projects in accordance with 10 CSR 20-6.010(1)(B), 10 CSR 20-6.010(5)(B), and RSMo 644.051 unless requested by the applicant or required by enforcement.

#### **PREREQUISITES:**

- 1. The Sewer Extension Construction Permit application, appropriate fee, and documentation in accordance with 10 CSR 20-6.010(5)(G).
- 2. Submit the Sewer Extension Construction Permit application at least sixty (60) days in advance of the start of construction in accordance with 10 CSR 20-6.010(5)(F).
- 3. Submit an electronic copy of the construction permit application and documents to <a href="mailto:DNR.WPPEngineerSection@dnr.mo.gov">DNR.WPPEngineerSection@dnr.mo.gov</a> in accordance with 10 CSR 20-6.010(5)(G)3.
- 4. The plans and specifications, each signed, sealed, and dated by a professional engineer registered in the State of Missouri in accordance with 10 CSR 20-8 and 10 CSR 20-6.010.
- 5. The Design Certification form, Engineering Report, or Summary of Design, signed, sealed, and dated by a professional engineer registered in the State of Missouri, certifying the design of the system is in accordance with 10 CSR 20-6 and 10 CSR 20-8.
- 6. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting the wastewater for treatment and indicating the permitted treatment facility has the available capacity.
- 7. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting responsibility for the operation and maintenance of these facilities.

#### **PERMIT CONDITIONS:**

- 1. This permit authorizes the activities and scope of work detailed in the plans and specifications submitted with the request.
- 2. The construction must be in accordance with the final plans and specifications received by the Department. Revisions that affect capacity, flow, or system layout must be approved by the Department prior to construction.

#### **PERMIT CONDITIONS: (continued)**

- 3. If construction will incorporate minor changes from previously submitted plans and specifications (i.e., changes that do not affect the capacity, flow, or system layout), submit an electronic copy of the as-built plans and specifications in accordance with 10 CSR 20-8.110(11).
- 4. State and Federal Law does not permit bypassing of raw wastewater; therefore, the applicant must take steps to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the Department's regional office per 10 CSR 20-7.015(9)(E) or through the Online Bypass/SSO Reporting service on the Missouri Gateway for Environmental Management (MoGEM) portal found at <a href="https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem">https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem</a>.

See <a href="https://dnr.mo.gov/document-search/missouri-gateway-environmental-management-mogem-frequently-asked-questions-pub2988/pub2988">https://dnr.mo.gov/document-search/missouri-gateway-environmental-management-mogem-frequently-asked-questions-pub2988/pub2988</a> for more information.

- 5. Protection of drinking water supplies must meet the requirements of 10 CSR 20-8.120(5).
  - A. There shall be no physical connections between a public or private potable water supply system and a sewer or appurtenance that would permit the passage of any wastewater or polluted water into the potable supply.
  - B. Lay sewers at least 50 feet (50') in a horizontal direction from any existing or proposed public water supply well or other water supply sources or structures.
- 6. Position manholes so that the top access is at or above grade level.
- 7. In addition to the requirements for a construction permit, see 10 CSR 20-6.200 for land disturbance requirements to obtain a Missouri State Operating Permit to discharge stormwater. The permit requires Best Management Practices sufficient to control runoff and sedimentation to protect waters of the state. Applicants shall obtain land disturbance permits through the Department's ePermitting system, available online at <a href="https://dnr.mo.gov/data-e-services/water/electronic-permitting-ep

See <a href="https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance">https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance</a> for more information.

8. Entities applying for funding under 10 CSR 20-4, "Grants and Loans" will need to comply with those requirements in addition to the requirements of 10 CSR 20-8.

### **PERMIT CONDITIONS: (continued)**

9. The Department may require a United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) or a permit waiver for the activities described in this permit. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S., then a 404/401 is required. Fulfillment of these requirements is necessary before the permit is considered valid. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the Department's Operating Permits Section at 573-522-4502 for more information.

See <a href="https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality">https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality</a> for more information.

- 10. If this project eliminates a wastewater treatment facility under the jurisdiction of the Department, then the applicant shall submit a full closure plan with a Facility Closure Request Form, Form MO 780-2512, to the Department's appropriate regional office for review and approval. In accordance with 10 CSR 20-6.010(12), the closure plan must meet the requirements outlined in Standard Conditions Part III of the Missouri State Operating Permit. Closure shall not commence until the Department approves the submitted closure plan.
- 11. If this project is part of a project to resolve an enforcement action or is receiving funding from the Department, submit a <u>statement of work complete</u> following the completion of construction.
- 12. Applicants may submit, prior to the expiration date of this permit, a written request that additional time is needed in accordance with 10 CSR 20-6.010(5)(H)3.

# RECEIVED

MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM

# APPLICATION FOR CONSTRUCTION PERMIT -SEWER EXTENSION

| APP NO.        | CP NO.    |   |
|----------------|-----------|---|
| \$300.00       | CHECK 149 | M |
| DATE RECEIVE 2 | 10/2024   |   |

|  |  | er Protection Pro  |  |  |   |
|--|--|--|--|--|---|
| NOTE ► Please Read the accompan  | ying instruct  | ions before comp   | eting this form  |  | 2/16/2024                                     |
| 1.0 APPLICATION INFORMATION (N considered incomplete and returned.)  | ote – If any of  | the questions in thi   | s section are ar   | nswered NO, this a   | application may be                            |
| 1.1 Is this a Federal/State funded proje   |  |  | ng Agency:   |  | Project #:                                    |
| 1.2 Has the Department of Natural Res ☐ YES Date of  | Approval,  |  | ✓ NO   |  | □ N/A   |
| 1.3 Is a copy of the appropriate plans*  | and specificat   | tions* included with   | this application   | ? ZYES D   |   |
| If the project is using standard spec  |  |  |  |  |   |
| 1.4 Is a summary of design* included w   |  |  | □ NO   |  |   |
| 1.5 Is the appropriate fee or JetPay cor<br>See Section 7.0  | nfirmation inclu   | uded with this application   | ation? TYES  | Z NO   |   |
| * Must be affixed with a Missouri registe  | red profession   | nal engineer's seat  | signature and o  | lata   |   |
| 2.0 PROJECT INFORMATION 2.1 NAME OF PROJECT  | Acquire (Sergel See  |  | organisation and o   | idio.  |   |
| MoDOT and Amphitheater Sewer Improv  | /ements  |  | · · · · · · · · · · · · · · · · · · ·                        |  |   |
| ADDRESS  | CITY   | the second secon | STATE  | ZIP CODE   | 2011/100                                      |
| lorth Business Highway No. 5   | Camden   | nton   | MO   | 65020  | County  |
| .2 Legal Description: 1/4.   | 1/4,   | 1/4, Sec. 14/15  | , T 38 N   | R 17 W   | Carridon                                      |
| .3 Project Components (check all that a  Gravity sewers Pumping statement of the second secon | ations Fo  |  | ternative sewer  |  | er (Describe below.) will deliver flow to the |
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| .3 Project Components (check all that a ☐ Gravity sewers ☑ Pumping statement of Pumping statement of Inches of  | ations  For Foreign Fo | ne, and 5,020 feet o   | f 4-inch pressu  | re sewer line that   | will deliver flow to the                      |
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| 4.0 CONTINUING AUTHORITY: A continuing for ensuring compliance with the permit required continuing authority should be a relatively permit when needed, of the permitted facility or activated by the permittee to sample or operate analytical laboratory. To access the regulator water Commission Chapter 6. A continuing a (SoS's) webpage: Missouri Secretary of State required to register with the SoS. | rements and propermanent entity revity. A continuing and maintain the requirement resuthority's name | ovide continuous si<br>esponsible for the<br>gauthority is not, h<br>system for a define<br>egarding continuing<br>must be listed exa | table over<br>ongoing o<br>owever, a<br>ed time pe<br>g authority<br>ofly as it a                                   | sight of the permitted facility or activity. The peration, maintenance and modernization, n entity or individual that is contractually eriod, such as a certified operator or , 10 CSR 20-6.010(2), please visit Clean ppears on the Missouri Secretary of Statele |  |
|--|--|---|---|--|--|
| NAME City of Camdenton   |  | HONE NUMBER WITH AR   | EA CODE   | EMAIL ADDRESS  |  |
| ADDRESS<br>437 W Hwy 54  | CITY   |   | STATE   | ZIP CODE   |  |
| CHARTER NUMBER (SECRETARY OF STATE)  | Camdenton  |   | MO  | 65020  |  |
| 4.1 Has appropriate continuing authority accepting A letter from the continuing authority accepting different than the original owner of the construction Treatment Facility Acceptance. Form 780-256 5.0 ENGINEER   | g responsibility fuction), or a prop   | or continued maint  | enance o  | f the sewer (if the continuing authority is uthority and Receiving Wastewater  |  |
| ENGINEER NAME / COMPANY NAME Darren Krehbiel Consultants, LLC  |  | HONE NUMBER WITH ARE  | A CODE  | EMAIL ADDRESS  |  |
| ADDRESS  | (573)  | 346-5316  | STATE   | krehbiel.darren@gmail.com  |  |
| 63 Blair Avenue  | Camdenton  |   | MO  | 65020  |  |
| 6.0 RECEIVING WASTEWATER TREATMEI  |  | HONE NUMBER WITH ARE  | 1.0005  | FUAL ADDRESS   |  |
| City of Camdenton  | (573)  | 346-3600  | A ÇODE  | ÉMÁIL ADDRESS  |  |
| MISSOURI STATE OPERATING PERMIT # MO-0106399   | Сат  |   |   | REMAINING CAPACITY (GPD) 272,000 GPD   |  |
| accept the expanded flow or has a properly e MO 780-2584 form been provided?   | tment facility, if o   | N/A<br>different than the c   | ontinuing   | authority, is included with this application.  |  |
| OPTIONAL QUESTIONS REGARDING MILI  |  |   |   | 140  |  |
| Have you or an immediate family member ever<br>J.S. Armed Forces?  |  | ☐ Yes   |   | □No  |  |
| f yes, would you like information about militar<br>n Missouri?   | /-related service  | s 🗌 Yes   |   | □No  |  |
| 7.0 Application Fee  |  |   |   |  |  |
| ☑ Check Number   |  | ☐ JetPay Co   | ☐ JetPay Confirmation Number  |  |  |
| B.0 PROJECT OWNER: I certify under penalty supervision in accordance with a system design submitted. Based on my inquiry of the person pathering the information, the information submit ware there are significant penalties for submit riolations.  ROJECT OWNER SIGNATURE   | ned to assure que<br>or persons who r<br>nitted is, to the b   | ualified personnel p<br>manage the systen<br>est of my knowled  | properly ga<br>n, or those<br>the and be  | ather and evaluate the information persons directly responsible for  |  |
| RINTED NAME STATE THOUSE   | ev   | <del></del>   |   | DATE   |  |
| TLE OR CORPORATE POSITION  CITY Abutus That  | TELEPHO<br>57:   | ONE NUMBER WITH AREA 344  | CODE  | Marker () Candent at   |  |
| Mail completed copy to:  |  |   | Submit or   |  |  |
| MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM PO BOX 176 JEFFERSON CITY, MO 65102-0176   |  | Mi<br>at D  | Submit completed electronic copy to:  Missouri Department of Natural Resources at DNR.WPPEngineerSection@dnr.mo.gov |  |  |

MO 780-1632 (10-22)

| 9.0  | SEWER EXTENSION                 | ON CHECKLIST   |              |          |
|------|---------------------------------|--|--------------|----------|
|      |                                 | DESIGN CERTIFICATION: Answer all questions yes or N/A. Answer N/A only if the question is  | clearly      | not      |
| appi | REGULATION                      | n of the proposed sewer extension.   | YES          | N/A      |
| 1.   | 8.110(3)(A)                     | Is the design flow based on actual flow data for an existing system?   | <b>V</b>     | 14//     |
| 2.   | 8.110(3)(B)                     | Are average design flows, peak hourly flows and I&I contributions for new systems calculated?  |              | TE       |
| 3.   | 8.110(9)(B)                     | Is there a detailed plan showing tributary area, boundaries, pertinent elevations, topography, existing and proposed facilities?   | V            |          |
| 4.   | 8.120(2)                        | Does the sewer exclude water from roofs, streets, groundwater from foundation drains and combined wastewater?  | V            |          |
| 5.   | 8.120(3)(A)                     | Is the pipe installation, embedment and backfill designed to prevent damage to the pipe and its joints?  | V            |          |
| 5.   | 8.120(3) (A)1                   | Is all sewer pipe constructed with a slope to obtain mean velocities of not less than 2 feet per second?   |              | V        |
| 7.   | 8.120(3)(A)2                    | Is the pipe covered with at least 36" of soil or sufficiently insulated to prevent freezing?   | V            | T        |
| 8.   | 8.120(3)(B)                     | Is deflection testing specified to ensure no pipe exceeds a deflection of 5% of the inside diameter?   |              | V        |
| 9.   | 8.120(4)(A)                     | Are manholes located at the end of each line, at all changes in grade, size or alignment and at all intersections?   |              | V        |
| 10.  | 8.120(4)(C)                     | Are manholes at least 42 inches in diameter with a clear opening of 22 inches on sewer line larger than 8"?  |              | <b>V</b> |
| 11.  | 8.120(4)(C)                     | Where cleanouts are used at the end of a lateral instead of a manhole, they are a minimum diameter of 8 inches or larger and equal to the diameter for pipes < 8"?   |              | V        |
| 2.   | 8.120(4)(E)                     | Are the manholes watertight, constructed and installed in accordance with the manufacturer's recommendations and procedures?   |              | V        |
| 3.   | 8.120(4)(F)                     | Do the specifications include a requirement for inspection and testing for manholes?   |              | V        |
| 4.   | 8.120(5)(A)                     | Is the sewer free from physical connections to a potable water supply system and no water pipes come in contact with a sewer manhole?  | ✓            |          |
| 5.   | 8.120(5)(B)                     | Are sewers and manholes located at least 50 feet horizontally from any existing or proposed water supply well, sources, structures?  | V            |          |
| 0.0  |                                 | ERS, GRINDER PUMP, STEP AND STEG SEWER CHECKLIST   |              |          |
|      | REGULATION                      |  | YES          | N/A      |
| 6.   | 8.125(5)(A)1.                   | Does the cleaning velocity of ≥ 2 ft/s happen more than once per day?  | $\checkmark$ |          |
| 7.   | 8.125(5)(A)2.                   | Is the diameter of the pressure sewer main pipe at least 1.5"?   | <b>✓</b>     |          |
| 8.   | 8.125(5)(B)                     | Are appurtenances compatible with the piping system?   | <b>V</b>     |          |
| 9.   | 8.125(5)(B)2.                   | Are isolation valves located: upstream of major pipe intersections; both sides of stream, bridge and RR crossings; at terminal end of system?  |              | <b>√</b> |
| 0.   | 8.125(5)(C)                     | Do service line pipes have a minimum diameter of 1.25"?  |              | <b>V</b> |
| 1.   | 8.125(5)(D)1.A                  | Do simplex grinder pump stations service only a single equivalent dwelling unit (EDU)? i.e. 1 residence – 1 grinder pumpt.   |              | ✓        |
| 2.   | 8.125(5)(D)1.B                  | Are multiple unit pump stations owned, operated and maintained by an approved continuing authority?  | <b>✓</b>     |          |
| 3.   | 8.125(5)(D)3.                   | Is there at least 70 gallons of storage in the grinder pump unit?  |              | ✓        |
| 4.   | 8.125(5)(D)4.                   | Do grinder pump stations have shutoff valves, check valves and anti-siphon valves (where siphoning could occur) that are accessible from the ground surface?   | <b>√</b>     |          |
| 5.   | 8.125(5)(D)7.,<br>8.130(3)(B)2. | Are units serviceable and replaceable under wet conditions without electrical hazard and is electrical equipment suitable for hazardous locations (National Electrical Code, Class I, Group D, Division 1 location)? | <b>V</b>     |          |
| 3.   | 8.125(5)(D)8.,<br>8.125(2)(F)6. | Are provisions in place to avoid interruption of service due to mechanical or power failure by providing standby power, storage capacity, or interconnection with another disposal system?                           |              | <b>√</b> |
| 7.   | 8.125(6)(D)                     | In a STEP system is at least one septic tank (1,000 gallons or more) provided for each EDU with 20% of tank volume dedicatied to freeboard and ventillation?   |              | <b>V</b> |
| 8.   | 8.125(6)(F)                     | Are duplex pumps provided for the design flow of 1,500 gallons or greater?   | <b>V</b>     |          |